

G^{Plus} Communications

G+ Communications LLC

101 E. Park Blvd

Suite 600

Plano, TX 75074

jpitcock@gpluscommunications.com

www.gpluscommunications.com**Via Email and Certified Mail**

January 20, 2022

Hye Jin Kim

Samsung Electronics Co., Ltd.

IP Center

129 Samseong-ro, Taejang-dong

Yeongtong-gu, Suwon, Gyeonggi-do, South Korea

Email: hyejin1214.kim@samsung.com

Dear Hye Jin Kim,

G+ Communications, LLC (“G+”) has reviewed the draft confidentiality agreement sent by your company. We do not believe that a confidentiality agreement is required at this time. Moreover, the draft appears to contain forum selection and other clauses that are not only unnecessary, but contrary to the spirit of good faith negotiations obligatory to both parties in a Fair, Reasonable, and Non-Discriminatory (“FRAND”) licensing negotiation.

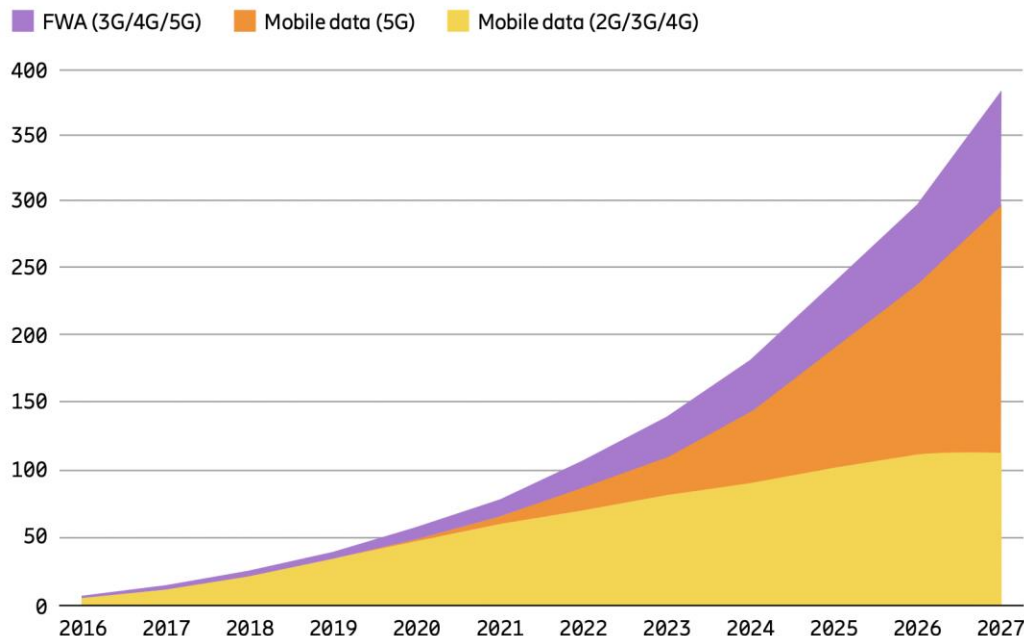
In an effort to advance this negotiation, G+ proposes the following settlement offer. This is an offer of compromise under Federal Rule of Evidence 408. In an actual litigation in which there is individualized findings of infringement, validity, and technical contribution on a patent-by-patent basis, the FRAND damages amount may be substantially higher.

G+ holds fifteen patent families that have been determined by independent analysis to be essential to 5G NG handsets. This is a unique portfolio of patents. First, they have been through multiple rounds of independent selection and analysis. Second these families have issued patents across worldwide markets. Third, they have their source in the ZTE research laboratories. ZTE’s accepted contributions to the 5G technical standard is, based on a November 2021 study, the fourth highest of any company in the world, and notably extremely close to Qualcomm’s contribution rates – 6.44% versus 5.37%.¹ Qualcomm announced a

¹ Pohlman et al., ipLytics November 2021.

royalty rate of 3.25% for multimode 5G handsets, and 2.275% for single mode 5G handsets.² This locates 70% of the value of cellular communication in 5G. We believe this is highly conservative. 5G is not simply an incremental improvement over 4G, it is driving handset sales far beyond what was predicted or is comparable to 4G.³ For example, below is the predicted scale of 5G data flow over the next five years.⁴

Figure 18: Global mobile network data traffic (EB per month)



A study commissioned by Ericsson indicates that approximately 8.0% of patents declared essential to 3GPP Release 15 NG are actually essential. This does not take into account validity, and therefore is also highly conservative.⁵ This means that Qualcomm's 5G standard essential patents are essentially being licensed at .01777% per standard essential patent family for 5G.

This results in a FRAND rate of 0.267% per unit for our portfolio of fifteen standard essential patent families using the Qualcomm benchmark rate.⁶ We are willing to negotiate multi-year and even lump sum licenses given reasonable assumptions about the market.

² <https://www.qualcomm.com/media/documents/files/qualcomm-5g-handset-licensing-program.pdf>

³ <https://www.ericsson.com/4ad7e9/assets/local/reports-papers/mobility-report/documents/2021/ericsson-mobility-report-november-2021.pdf> ;
<https://www.rcrwireless.com/20210331/5g/if-5g-device-shipments-hit-2021-expectations-5g-can-claim-mainstream-status>

⁴ <https://www.ericsson.com/4ad7e9/assets/local/reports-papers/mobility-report/documents/2021/ericsson-mobility-report-november-2021.pdf>

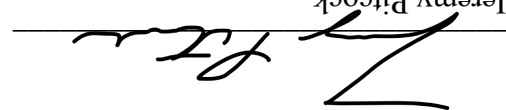
⁵ Cooper et al., Survey of Mobile 5G Essentiality Rate (2021),
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3771397

⁶ This assumes that Qualcomm has approximately 1600 declared SEP families essential to 5G NG handset features that Samsung implements. Once again, this is highly conservative. A large number of recent declarations relate to Release 16 which covers many features beyond those Samsung would implement in handsets in any near term period. https://www.iplytics.com/wp-content/uploads/2020/02/5G-patent-study_TU-Berlin_IPlytics-2020.pdf;

- 3 -

<https://clarivate.com/blog/demystifying-the-5g-standard-essential-patent-landscape-phase-2/>;
<https://www.edn.com/3gpp-release-16-what-are-the-key-enhancements-and-new-features/>

Best regards,


Jeremy Pitcock
Manager
G+ Communications LLC